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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/087,598 | 03/01/2002 | Michael F. Fallon | 10559-691001/P13299 | 7921 |
| 20985 | 7590 | 03/08/2006 | EXAMINER | |
| FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | GREY, CHRISTOPHER P | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2667 | |

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,598

Applicant(s)

FALLON ET AL.

Examiner

Christopher P. Grey

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-15, 17, 19-21, 26, 27, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Mangin et al. (US 5982778), hereinafter referred to as Mangin.

Claim 1, 17, 19, 21, 26, 27, 28 Mangin discloses determining whether to authorize transmission of received data (Col 3 lines 5-21) having a variable size within a predetermined range (Col 5 lines 28-43), where a received station implements flow control to ensure that an overload condition does not occur.

Mangin discloses the determination being based on whether a predetermined amount of a time-based variable has substantially elapsed, predetermined amount being related to a rate shaping criterion, and the determination being made without regard to the size of the received data (Col 5 lines 66-Col 6 line 24 and Col 7 lines 1-31 and see fig 4a);

Mangin discloses authorizing transmission if the predetermined amount has substantially elapsed; and determining, if transmission was authorized, a new value for the predetermined amount that must substantially elapse before a further transmission can be authorized (Col 5 line 66—Col 6 line 24 and Col 7 lines 1-21 and see fig 4b).

Claim 2, 23 Mangin discloses receiving the received data (Col 4 lines 26-45) and transmitting the received data (Col 5 lines 57-65).

Claim 3 Mangin discloses regulating packet flow (see title) and flow control (Col 2 lines 28-30).

Claim 4 Mangin discloses the data being either received or transmitted in packets (Col 6 lines 58-67).

Claim 5 Mangin discloses a predetermined range including multiple packet sizes in a packet based system where Mangin discloses transmitting packet data from a sending station to a receiving station, wherein when an overload condition is experienced in the receiving station, transmission is stopped, thus

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the range is dependent on an overload condition (Col 5 lines 30-43), and furthermore, Mangin discloses monitoring the size of transmitted packets (Col 5 lines 57-65).

Claim 7 Mangin discloses determining whether the predetermined amount of the time based variable has substantially elapsed (Col 6 line 66-Col 6 line 24).

Claim 8, 9 Mangin discloses calculating a wait time, where the wait time is directly proportional to the size of the previously transmitted data and a transmission data rate (Col 7 lines 1-21 and element 94 in fig 4a), where a clock frequency can be assumed to be 1.

Claim 10 Mangin discloses the time based variable is time (Col 5 lines 57-65).

Claim 11, 12 Mangin discloses the predetermined amount of time being determined after a first transmission is authorized and completely elapses before a second transmission is authorized (see fig 4 a and b).

Claim 13, 20 Mangin discloses queuing a packet for transmission (Col 10 lines 56-62 and Col 7 lines 49-57).

Claim 14 Mangin discloses the received data being received or transmitted over a dedicated line (see fig 1 element 50).

Claim 15 Mangin discloses the received data being received from a wide area network (Col 5 line 66-Col 6 line 14) and transmitted to a port aggregator (Col 5 lines 22-28).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Archaya (US 6901050)

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Claim 24 Archaya discloses providing a bucket for each flow (Col 7 lines 28-64 and Col 8 line 19), each bucket having variable size depending on a size of a unit of data previously transmitted on the corresponding flow (Col 8-line 59-Col 9 line21 and see fig 7)

Archaya discloses accumulating tokens in each bucket at an average flow rate for the corresponding flow (Col 9 lines 8-21).

Archaya discloses authorizing transmission of a unit of data on a particular flow only when the corresponding bucket is full of tokens (Col 5 lines 35-61).

Archaya discloses removing all of the tokens from the bucket for a particular flow when a unit of data is authorized for transmission on that flow (Col 7 lines 28-40 and Col 8 lines 20-56).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6, 18, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangin (US 5982778) in view of Lenoski et al. (US 6735173), hereinafter referred to as Lenoski.

Claim 6, 22 Mangin does not specifically disclose a single bit vector reflecting whether the predetermined amount has substantially elapsed.

Lenoski discloses sending flow control data in the occurrence of an expiration of time (see fig 8A), where the flow control contains a single bit vector indication (Col 13 lines 44-60).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine an indicator bit as disclosed by Lenoski within the data as disclosed by Mangin. The motivation for this combination is to indicate a congestion/occurrence state.

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Claim 18 Mangin discloses calculating a wait time, where the wait time is directly proportional to the size of the previously transmitted data and a transmission data rate (Col 7 lines 1-21 and element 94 in fig 4a), where a clock frequency can be assumed to be 1.

Mangin does not specifically disclose a single bit vector reflecting whether the predetermined amount has substantially elapsed.

Lenoski discloses sending flow control data in the occurrence of an expiration of time (see fig 8A), where the flow control contains a single bit vector indication (Col 13 lines 44-60).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine an indicator bit as disclosed by Lenoski within the data as disclosed by Mangin. The motivation for this combination is to indicate a congestion/occurrence state.

4. Claim 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangin (US 5982778) in view of Archaya (US 6901050)

Claim 25 Archaya does not specifically disclose a single bit vector reflecting whether the predetermined amount has substantially elapsed.

Lenoski discloses sending flow control data in the occurrence of an expiration of time (see fig 8A), where the flow control contains a single bit vector indication (Col 13 lines 44-60).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine an indicator bit as disclosed by Lenoski within the data as disclosed by Archaya. The motivation for this combination is to indicate a congestion/occurrence state.

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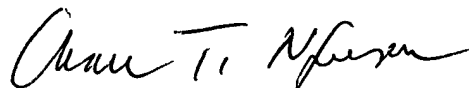
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571)272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Grey
Examiner
Art Unit 2616

C. Grey
3/6/06



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